UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,996	05/20/2004	Gregory D. Watkins	D5561	8760
	90 . 01/05/200 AL ENGINE INTEL	EXAMINER		
INTERNATIONAL ENGINE INTELLECTUAL PROPERTY COMPANY 4201 WINFIELD ROAD P.O. BOX 1488 WARRENVILLE, IL 60555			JIMENEZ, MARC QUEMUEL	
			ART UNIT .	PAPER NUMBER
			3726	
	•		· .	
SHORTENED STATUTORY I	PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
31 DAYS		01/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		C			
ant(s)					
NS ET AL.					
t		_			
ndence ad	Idress				
HIRTY (30) DAYS,					
date of this c C. § 133). ce any	ommunication.				
n as to the 213.	e merits is				
er. 3 1.85(a). 3 See 37 Cl or form Pi	FR 1.121(d). ΓΟ-152.				
f).					
 National	Stage				

	Application No.	Applicant(s)					
	10/849,996	WATKINS ET AL.					
Office Action Summary	Examiner	Art Unit					
	Marc Jimenez	3726					
The MAILING DATE of this communication app							
Period for Reply		·					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period was realiure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on		•					
<u> </u>							
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-23</u> is/are pending in the application.	4) Claim(s) 1-23 is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6) Claim(s) is/are rejected.	•	•					
7) Claim(s) is/are objected to.							
8) Claim(s) <u>1-23</u> are subject to restriction and/or e	election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the	Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119	•						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents	• •						
3. Copies of the certified copies of the prior	•	ed in this National Stage					
application from the International Bureau							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date							
Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application Paper No(s)/Mail Date 6) Other:							

Art Unit: 3726

DETAILED ACTION

Page 2

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-6, drawn to a method of assembling a core assembly, classified in class29, subclass 525.01.
 - II. Claims 7-8, drawn to a method of fastening a core assembly together, classified in class 29, subclass 432.
 - III. Claims 9-10, drawn to a method of assembly of two core elements for an internal combustion engine casting assembly, classified in class 29, subclass 432.
 - IV. Claims 11-14, drawn to a method of assembly of an internal combustion engine head casting assembly, classified in class 29, subclass 432.
 - V. Claims 15-18, drawn to a method of manufacture of an internal combustion engine head, classified in class 29, subclass 888.01.
- VI. Claims 19-23, drawn to an apparatus, classified in class 29, subclass 700.

 The inventions are distinct, each from the other because of the following reasons:
- 2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group II) does not require a smooth surface fastener. The

subcombination has separate utility such as use in a combination that does not require a plurality of staple guns.

- 3. Inventions I and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group III) does not require the step of positioning the core elements in a core assembly. The subcombination has separate utility such as use in a combination other than for making an internal combustion engine casting assembly.
- 4. Inventions I and IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group IV) does not require the step of positioning the core elements <u>in</u> a core assembly. The subcombination has separate utility such as use in a combination other than for making an internal combustion engine casting assembly.
- 5. Inventions I and V are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant

case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group V) does note require the step of positioning the core elements <u>in</u> a core assembly. The subcombination has separate utility such as use in a combination that does note require the step of sensing.

- 6. Inventions I and VI are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process does not require a pressure-applying roof.
- 7. Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group II) does note require an internal combustion engine casting assembly. The subcombination has separate utility such as use in a combination without a plurality of staple guns.
- 8. Inventions II and IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as

Page 5

claimed because the combination (group II) does note require an internal combustion engine head casting assembly. The subcombination has separate utility such as use in a combination without a plurality of staple guns.

- 9. Inventions II and V are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group V) does not require a fastening fixture and simultaneously driving a plurality of staples. The subcombination has separate utility such as use in a combination without the step of lifting a stopped core assembly.
- 10. Inventions II and VI are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process does not require a pressure-applying roof.
- 11. Inventions III and IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group IV) does not require driving a smooth surface fastener

to span an interface between at least two core sand elements. The subcombination has separate utility such as use in a combination other than for an internal combustion engine <u>head</u> or a combination without the step of passing the fastener through one of the core sand elements, the interface, and into the other core sand element.

- 12. Inventions III and V are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group III) does not require the step of driving a smooth surface fastener to span an interface between the at least two core sand elements. The subcombination has separate utility such as use in a combination without the step of lifting.
- 13. Inventions III and VI are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case In this case the process does not require a pressure-applying roof.
- 14. Inventions IV and V are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as

Art Unit: 3726

claimed because the combination (group V) does not require the step of passing the fastener through one of the core sand elements, the interface, and into the other core sand element. The subcombination has separate utility such as use in a combination without the step of lifting.

- 15. Inventions IV and VI are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case In this case the process does not require a pressure-applying roof.
- 16. Inventions V and VI are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case In this case the process does not require a pressure-applying roof.
- 17. The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Art Unit: 3726

18. Because these inventions are independent or distinct for the reasons given above and

Page 8

there would be a serious burden on the examiner if restriction is not required because the

inventions have acquired a separate status in the art in view of their different classification,

restriction for examination purposes as indicated is proper.

19. Because these inventions are independent or distinct for the reasons given above and

there would be a serious burden on the examiner if restriction is not required because the

inventions require a different field of search (see MPEP § 808.02), restriction for examination

purposes as indicated is proper.

20. Because these inventions are independent or distinct for the reasons given above and

there would be a serious burden on the examiner if restriction is not required because the

inventions have acquired a separate status in the art due to their recognized divergent subject

matter, restriction for examination purposes as indicated is proper.

21. This application contains claims directed to the following patentably distinct species:

Species A: figure 2

Species B: figure 4

Species C: figure 5

The species are independent or distinct because they are drawn to different fastener

attachment methods.

After electing one of species A-C, applicant must also elect one of the following

patentably distinct species:

Species D: figure 3

Species E: figures 8-9

Species F: figures 10-12

The species are independent or distinct because they are drawn to different fastener types of assembly apparatuses.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

22. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Art Unit: 3726

Page 10

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

- 23. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is (571) 272-4530. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marc Jimenez, Primary Examiner

Art Unit 3*7/*2

MJ

12-22-06